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10/099,983	03/19/2002	Yue-Chuan Chu	003493.00517	5515

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EXAMINER	
JAGANNATHAN, MELANIE	
ART UNIT	**PAPER NUMBER**
2666	

DATE MAILED: 01/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/099,983	CHU ET AL.	
	Examiner	Art Unit	
	Melanie Jagannathan	2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 March 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kung et al. US 6,816,469 (hereinafter Kung) in view of Aravamudan et al. US 6,584,076.

Regarding claim 1, the claimed method for establishing a VOIP conference call by joining a first VOIP station in a communication between a plurality of communication stations, wherein at least one of the plurality of communication stations is a second VOIP station in a private network and first VOIP station is in the private network is

disclosed by one or more call waiting callers can dynamically join in an existing call and establish a multiple-party conference call including a first call between a first party and a second party (plurality of communication stations, second VOIP station), receiving a first request from third party to provide a call waiting call and converting first call and call waiting call into a conference call to include first, second and third parties. See column 2, lines 6-15. Kung discloses one or more customer premises equipment including broadband residential gateways providing interfaces to devices within customer premises equipment such as IP enabled phones and POTS phones. See column 3, lines 27-42.

The claimed receiving an indication from the first VOIP station for joining a VOIP call between the plurality of communication stations is disclosed by third broadband residential gateway in customer premises equipment requests the call manager (Figure 2, element 218) in IP central station (Figure 1, element 200) to provide connection to first broadband residential gateway (BRG) for a call. After receiving request, first BRG requests caller information from third BRG, which then provides user information data to call manager. See column 31, lines 45-53, lines 59-67.

The claimed managing data packet transmission between first VOIP station and one of the plurality of communication stations is disclosed by call manager transfers call between first and third BRG and call between first and second BRG to conference server (Figure 2, element 224) by instructing each of the first, second and third BRGs to send future IP packets to conference server and conference call is established between all three parties. See column 32, lines 22-47.

Kung et al. discloses audio streams passed between customer premises equipment using RTP over UDP. See column 13, lines 8-14. However, Kung et al. does not disclose the claimed establishing an RTP voice path with the first VOIP station for joining a VOIP call between the plurality of communication stations. Aravamudan et al. discloses devices which can be IP telephones (Figure 1, element 103) interfaced to device servers (element 101) and discloses a conference call on which there are three or more device servers. When a user on device server requests to be added to conference call, call coordinator (element 105) selects a conference bridge to connect device server to other device servers so newly added device server can transmit media in the form of RTP/UDP packets over logical links (element 119) where RTP/UDP protocol is used. See column 4, lines 30-36, column 6, lines 25-34, column 7, lines 2529, lines 43-55. At the time the invention was made it would have been obvious to modify Kung et al. to connect user to conference over logical links using RTP/UDP protocol as in Aravamudan et al. One of ordinary skill in the art would be motivated to do this for transmission of media packets among the different devices.

Regarding claim 2, the claimed at least one of the plurality of communication stations is a PSTN phone is disclosed by Kung et al. by one or more customer premises equipment including broadband residential gateways providing interfaces to devices within customer premises equipment such as IP enabled phones and POTS phones. See column 3, lines 27-42. Additionally, Kung discloses an IP-based call to a PSTN call. See column 25, lines 34-67, columns 26-27.

Regarding claim 3, the claimed at least one of the plurality of communication stations is a VOIP phone is disclosed by Kung et al. by one or more customer premises equipment including broadband residential gateways providing interfaces to devices within customer premises equipment such as IP enabled phones and POTS phones. See column 3, lines 27-42.

Regarding claims 4, 20, Kung et al. discloses a third broadband residential gateway in customer premises equipment requesting the call manager (Figure 2, element 218) in IP central station (Figure 1, element 200) to provide connection to first broadband residential gateway (BRG) for call. See column 31, lines 45-50. Additionally, Kung discloses BRG generating an off-hook signal to call manager. See column 25, lines 34-43. Page 9 of the instant specification discloses the switch signal to be a switch from on-hook to off-hook.

However, Kung et al. does not disclose BRG generating the switch signal as indication to join a VOIP call between a plurality of communication stations. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify Kung et al. with BRG generating off-hook signal to call manager as part of conference call disclosed in Figure 8. One of ordinary skill in the art would be motivated to do so since off-hook signal acts as a dial tone request to call manager which would indicate desire to make call. See column 25, lines 39-43.

Regarding claims 5-6, 21-22, Kung et al. discloses third broadband residential gateway in customer premises equipment requests the call manager (Figure 2, element 218) in IP central station (Figure 1, element 200) to provide connection to first

broadband residential gateway (BRG) for call. After receiving request, first BRG requests caller information from third BRG, which then provides user information data to call manager. See column 31, lines 45-53, lines 59-67. Page 9 of the instant specification discloses the code number could be corresponding to desired second VOIP phone. The Examiner interprets that code could correspond to phone user information data and Kung et al. discloses the user information data provided by third BRG for call.

However, Kung et al. does not disclose the claimed indication to join a VOIP call between a plurality of communication stations comprising a code number identifying a connection in private network. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify Kung et al. to have third BRG requesting to provide connection for call to provide user information data as an indication to call manager to join call. One of ordinary skill in the art would have been motivated to do so for identification of party involved in call.

Regarding claims 7, 23, Kung discloses call manager (Figure 2, element 218) is configured to maintain the call states for each call it handles and interacts with devices connected to single circuit on PSTN and/or device connected to BRG. See column 10, lines 1-16.

However, Kung et al. does not disclose the claimed further comprising informing the plurality of communication stations the status of the first VOIP. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify Kung et al. to have call manager maintain the state of members for the calls it

handles. One of ordinary skill in the art would be motivated to do this to have knowledge of members joining or leaving conference calls.

Regarding claims 8, 10, the claimed managing data packet transmissions comprises mixing data packets from first VOIP station and at least one of the plurality of communication stations is disclosed by Kung et al. by conference server configured to provide multiparty conference calls with multiplexing and de-multiplexing capability for segregating and aggregating user information packets. See column 11, lines 32-53.

Regarding claims 9, 11, the claimed managing data packet transmissions further comprises sending the mixed data packets to at least one of the plurality of communication stations including first VOIP station is disclosed by Kung et al. by when information packets are sent from one or more phones, they are aggregated and sent to the other phones in the conference call by conference server. See column 11, lines 35-42.

Regarding claim 12, the claimed indicating a busy status on the first VOIP station is disclosed by user picks up a telephone and this sends a signal to call manager which causes the broadband residential gateway or the call manager to play a busy signal. See column 8, lines 27-31, lines 40-42, lines 48-51, column 9, lines 4-11.

Regarding claims 13-15, 29-31, Kung et al. discloses calling party hanging up and an on-hook sequence is initiated. See column 27, lines 15-22, column 29, lines 12-14.

However, Kung et al. does not disclose the claimed receiving an on-hook signal from first VOIP station and from at least one of the plurality of communication stations

and call is disconnected. At the time the invention was made it would have been obvious to modify Kung et al. to include in conference call disclosed in Figure 8 the initiation of on-hook sequence. One of ordinary skill in the art would be motivated to do so to tear-down connection to end conference call for one or more parties.

Regarding claim 16, the claimed establishing a VOIP conference call by joining a first VOIP station in a communication between a plurality of communication stations, wherein at least one of the plurality of communication stations is a second VOIP station in a private network and first VOIP station is in the private network is disclosed by one or more call waiting callers can dynamically join in an existing call and establish a multiple-party conference call including a first call between a first party and a second party (plurality of communication stations, second VOIP station), receiving a first request from third party to provide a call waiting call and converting first call and call waiting call into a conference call to include first, second and third parties. See column 2, lines 6-15. Kung discloses one or more customer premises equipment including broadband residential gateways providing interfaces to devices within customer premises equipment such as IP enabled phones and POTS phones. See column 3, lines 27-42.

The claimed device including a receiver for receiving an indication from the first VOIP station for joining a VOIP call between the plurality of communication stations is disclosed by call manager (Figure 2, element 218) in IP central station (Figure 1, element 200). The third broadband residential gateway in customer premises equipment requests the call manager in IP central station to provide connection to first

broadband residential gateway (BRG). After receiving request, first BRG requests caller information from third BRG, which then provides user information data to call manager. The Examiner interprets the indication for joining a VOIP call to be the user information data provided by third BRG to join call. See column 31, lines 45-53, lines 59-67.

The claimed apparatus for establishing an RTP voice path with the first VOIP station and managing data packet transmission between first VOIP station and plurality of communication stations is disclosed by call manager provides centralized call control center for supporting call set-up and tear down in broadband network. See column 9, lines 30-33. Audio streams passed between customer premises equipment using real time protocol connections over UDP. See column 13, lines 8-14. Additionally, the call manager transfers call between first and third BRG and call between first and second BRG to conference server (Figure 2, element 224) by instructing each of the first, second and third BRGs to send future IP packets to CS and conference call is established between all three parties. See column 32, lines 22-47.

Kung et al. discloses conference server (Figure 2, element 224) in IP central station configured to provide multiparty conference calls with multiplexing and de-multiplexing capability for segregating and aggregating user information packets. When information packets are sent from one or more phones, they are aggregated and sent to the other phones in the conference call by conference server. See column 11, lines 35-53. Kung et al. does not disclose the claimed RTP mixer. Aravamudan et al. discloses conference bridges (Figure 1, element 107) performing conferencing functions including media mixing of media transmitted and received devices over logical links (element 119)

using RTP/UDP protocol. See column 6, lines 9-10, lines 25-34. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify conference server of Kung et al. with media mixing capability of conference bridge of Aravamudan et al. One of ordinary skill in the art would be motivated to do this for transmission of media packets among the different devices.

Regarding claim 17, Kung et al. discloses call manager (Figure 2, element 218) is configured to maintain the call states for each call it handles and interacts with devices connected to single circuit on PSTN and/or device connected to BRG. See column 10, lines 1-16.

However, Kung et al. does not disclose the claimed status monitor for informing a VOIP call agent of the status of the first VOIP station. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify Kung et al. to have call manager maintain the state of members for the calls it handles. One of ordinary skill in the art would be motivated to do this to have knowledge of members joining or leaving conference calls.

Regarding claim 18, the claimed at least one of the plurality of communication stations is a PSTN phone is disclosed by one or more customer premises equipment including broadband residential gateways providing interfaces to devices within customer premises equipment such as IP enabled phones and POTS phones. See column 3, lines 27-42. Additionally, Kung discloses an IP-based call to a PSTN call. See column 25, lines 34-67, columns 26-27.

Regarding claim 19, the claimed at least one of the plurality of communication stations is a VOIP phone is disclosed by one or more customer premises equipment including broadband residential gateways providing interfaces to devices within customer premises equipment such as IP enabled phones and POTS phones. See column 3, lines 27-42.

Regarding claims 24, 26, the claimed managing data packet transmissions comprises mixing data packets from first VOIP station and at least one of the plurality of communication stations is disclosed by conference server configured to provide multiparty conference calls with multiplexing and de-multiplexing capability for segregating and aggregating user information packets. See column 11, lines 32-53.

Regarding claims 25, 27, the claimed managing data packet transmissions further comprises sending the mixed data packets to at least one of the plurality of communication stations including first VOIP station is disclosed by when information packets are sent from one or more phones, they are aggregated and sent to the other phones in the conference call by conference server. See column 11, lines 35-42.

Regarding claim 28, the claimed indicating a busy status on the first VOIP station is disclosed by user picks up a telephone and this sends a signal to call manager which causes the broadband residential gateway or the call manager to play a busy signal. See column 8, lines 27-31, lines 40-42, lines 48-51, column 9, lines 4-11.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Summers et al. US 6,961,416 disclose Internet-enabled conferencing system and method accommodating PSTN and IP traffic.
- Laursen et al. US 6,847,618 disclose distributed conference bridge processing.
- Maggenti et al. US 6,965,767 disclose communication device for entering and exiting a net within a group communication network.
- Foti US 6,785,246 discloses multi-party conferencing method.
- Isaka US 6,654,455 discloses IP conference telephone system compatible with IP-PBX systems.
- Mandalia et al. US 6,654,456 disclose multi-service communication system and method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Jagannathan whose telephone number is 571-272-3163. The examiner can normally be reached on Monday-Friday from 8:00 a.m.-4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Seema S. Rao 1/11/06

MJ
12/19/2005

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